

ABSTRACT OF THE DISCLOSURE

One or more embodiments of the invention provide a method, apparatus, and article of manufacture for refining an approximate location of a mobile device using fuzzy logic reasoning. An approximate location of a device is determined. A rule based
5 that comprises an ordered collection of rules is then read into memory, or loaded from a database. A set of imprecise inputs are captured for processing in the rules.
However, prior to processing the inputs in the rules, the inputs are processed to
determine a magnitude of participation of the input in the rules. The rules are then
applied to the imprecise inputs based on the magnitude of participation to produce a
10 logical product. A refined location is then computed based on the logical product.

TOP SECRET - CANTERBURY

"Express Mail" mailing label number E2904208601 US
Date of Deposit DECEMBER, 26, 2001
I hereby certify that this paper or fee is being de-
posited with the United States Postal Service "Express Mail"
Post Office to Addressee" service under 37 CFR 1.10 on
the date indicated above and is addressed to:
Commissioner for Patents, Washington, D.C. 20231.
Suzie McCleave
(Printed Name)
Suzie McCleave
(Signature)